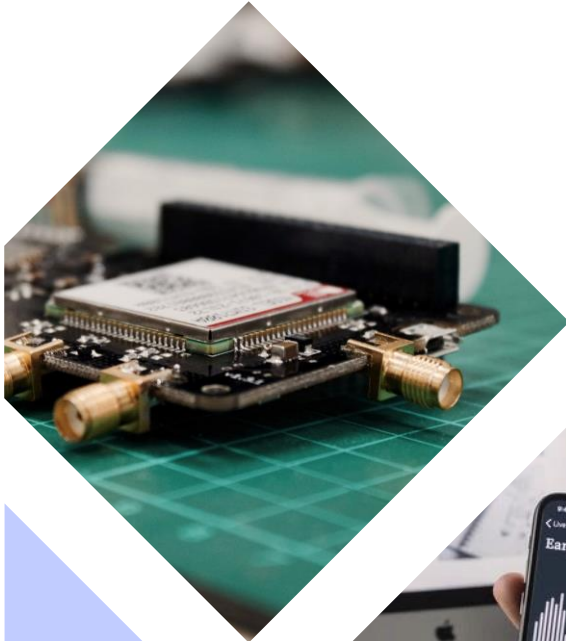


INTERNET OF THINGS



**PROSPECTUS FOR
CAPSULELABS IOT
CERTIFICATIONS**



OUR VISION

CREATE TECHNOLOGY LEADERS CAPABLE OF GENERATING NEW EMPLOYMENT OPPORTUNITIES BY DELIVERING SOCIAL ENTERPRISES TO ADDRESS HYPERLOCAL CHALLENGES AND SET FORTH A CYCLE OF SPIRITED INNOVATION.

OUR MISSION

DEVELOP 10 LAKH TECHNOLOGY LEADERS IN 10 YEARS.

OUR COMPETENCY

INTERNET OF THINGS & ALLIED EMERGING TECHNOLOGIES.

09.04.2021
2:50 – 4:20pm
<https://meet.google.com/tsr-jzog-zoz>




Topic and speaker

Machine Learning in the Internet of Things
Atanu Roy Chowdhury
Founder, CEO, Capsule Labs





22.04.2021
5:50–7:15pm
Meeting <https://meet.google.com/ofz-ibgs-bsx>
Registration




Topic and speaker


Innovation in the Internet of Things
Atanu Roy Chowdhury
Founder, CEO Capsule Labs









Certificate of Participation for attending students

06.04.2021
5:00-6:00pm
<https://meet.google.com/>




Topic and speaker

Machine Learning in the Internet of Things
Atanu Roy Chowdhury
Founder, CEO Capsule Labs

Careers planning for Computer Engineers

“

THE IOT MANAGED SERVICES IS GROWING AT 30% ANNUALLY, PROVIDING FOR INORGANIC CAREER GROWTH OPPORTUNITIES IN INDIA. THIS DISRUPTIVE INNOVATION IS DRIVEN THROUGH AN ECOSYSTEM OF ESTABLISHED COMPANIES AND HIGH OCTANE STARTUPS.

”


B. P. PODDAR INSTITUTE OF MANAGEMENT AND TECHNOLOGY
Department of Electrical Engineering Presents


APSULE LABS

23.04.2021
5:50–7:15pm
Meeting <https://meet.google.com/ofz-ibgs-bsx>




Topic and speaker

Internet of Things For Electrical Engineers
Atanu Roy Chowdhury, Founder, Capsule Labs





Certificate of Participation for attending students


Department of Applied Electronics & Instrumentation Engineering
Techno Main Salt Lake, Kolkata

Presents.....

Industry Institute Interaction Program
On
Innovation in Internet of Things

PEAKER



ATANU ROY CHOWDHURY
MS, M.Tech, SMIEEE, MCSI, IOT Solution Architect
Founder, CEO -Capsule Labs

20.04.2021 3.00pm to 5.00pm Through webina

Please click the link below to join the webinar
Webinar link : <https://us02web.zoom.us/j/88756383737>
Registration link : <https://forms.gle/3DwZLKhR8NcNV8AJ9>
Registration link will be open till 19.04.2021 at 11:59pm




Narula Institute of Technology
Department of Computer Applications


APSULE LABS

16.04.2021
11am–12:15pm
<https://meet.google.com/>




Topic and speaker

Machine Learning in the Internet of Things
Atanu Roy Chowdhury
Founder, CEO, Capsule Labs





IOT INDUSTRY READINESS.WHY?


BENEFITS

- FIRST MOVER ADVANTAGE
- BETTER ENTRY LEVEL COMPENSATION
- INORGANIC GROWTH AND HIGHER VISIBILITY
- OPPORTUNITY FOR DISRUPTIVE WORK
- ABILITY TO WORK IN CORE AREAS
- PRESERVES CURRENT MAINSTREAM OPPORTUNITIES

CAREER CHOICES

-  IOT FIELD ENGINEERING
-  IOT RESEARCH
-  IOT PROTOTYPING
-  IOT PRODUCT DEVELOPMENT
-  IOT SOLUTION ARCHITECTS
-  IOT PRODUCT MANAGEMENT

TECH STACK

-  EMBEDDED SYSTEMS
-  IOT CLOUDS
-  IOT MOBILE APPS
-  IOT WEBAPPS
-  AI/ML SYSTEMS
-  IOT BLOCKCHAINS

OUR CERTIFICATION APPROACH

CREATING INDUSTRY READINESS, THROUGH DRASTIC IMPROVEMENT IN PROJECT EXECUTION AND LEARNABILITY, DRIVEN BY PERSONAL MOTIVATIONS.

FEATURES

FLEXIBILITY

DEVELOP PERSONAL INSIGHTS/ INTERESTS INTO PROJECTS.

SCOPING

IDENTIFY REUSABLE COMPONENTS, TOOLS AND ACCURATE KNOWLEDGE BASES FOR ACHIEVING PROJECT GOALS.

PROJECT-CENTRICITY

ONLINE ASSESSMENTS BY AIOT EXPERTS USING INDUSTRY DISTILLED GAPGRUD PROCESS, SIMULATING AGILE PROJECT LIFE CYCLE METHODOLOGY.

PROVENENCE

ADVANCED PSYCHOMETRIC TOOLS TO IDENTIFY ROLE FITMENT BASED ON PROJECT EXECUTION METHODOLOGY.

BENEFITS

- > MOTIVATION FOR IMPROVEMENT.
- > INNOVATION AND ENTREPRENEURSHIP.

- > INTERFACE DEFINITION.
- > EFFORT AND SCHEDULE REDUCTION.
- > RISK IDENTIFICATION & MITIGATION.
- > INTELLECTUAL PROPERTY CREATION.

- > PROJECT GOALS, SCHEDULE AND EFFORTS ARE THOROUGHLY TRACKED.
- > ENSURES PROJECT CLOSURE.
- > CONFIDENCE FROM IMPLEMENTATION.

- > TRANSPARANT ASSESSMENT
- > DETAILED CERTIFICATES
- > VISIBILITY INTO SUITABLE JOB ROLES.

OUR IOT CERTIFICATIONS

FOUNDATIONAL CERTIFICATIONS

(CLC001) IOT FULL STACK DEVELOPER CERTIFICATE

(CLC002) IOT ANDROID DEVELOPER CERTIFICATE

(CLC003) IOT CLOUD DEVELOPER CERTIFICATE

(CLC004) IOT EMBEDDED DEVELOPER CERTIFICATE

(CLC005) IOT BLOCKCHAIN DEVELOPER CERTIFICATE

(CLC006) IOT AI/ML DEVELOPER CERTIFICATE

ADVANCED CERTIFICATIONS

(CLC021) IOT DEVELOPER CERTIFICATE

(CLC031) AIOT DEVELOPER CERTIFICATE

IOT FULL STACK DEVELOPER CERTIFICATE

PREREQUISITES

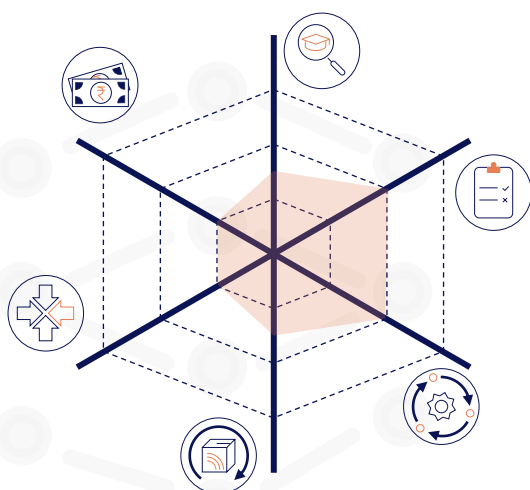
JS/PYTHON & HTML/CSS PROGRAMMING SKILLS.
FUNDAMENTALS OF RELATIONAL AND TIMESERIES DATABASES.
UNDERSTANDING OF FUNCTIONAL TESTING.
UNDERSTANDING OF RESTFUL ARCHITECTURE.

CERTIFICATION DETAILS

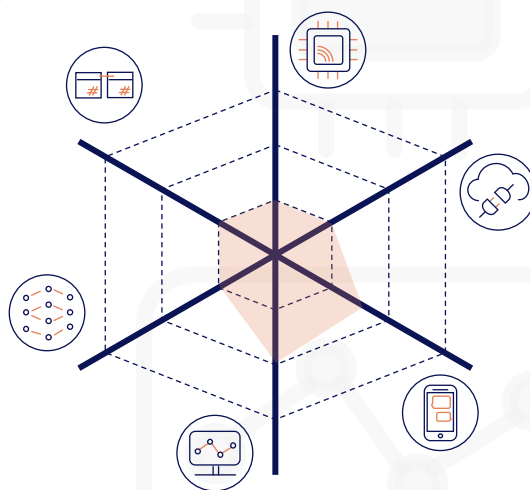
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 250 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF A WEB APPLICATION FOR INTERACTING WITH OR MANAGING IOT DEVICES.

TARGET SKILLS: NODEJS/PYTHON, POSTGRES/MONGO/FIREBASE, EXPRESS/ BOOTSTRAP, ANGULAR/REACT, JSON/XML, HTML,CSS, FIGMA, POSTMAN, HTTP, WIFI.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT ANDROID DEVELOPER CERTIFICATE

PREREQUISITES

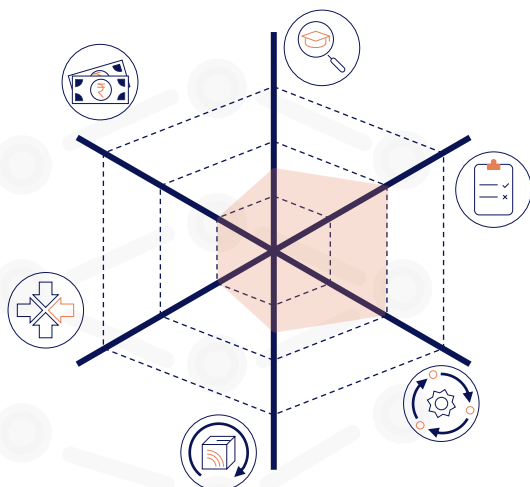
JAVA/NODEJS PROGRAMMING SKILLS.
UNDERSTANDING OF FUNCTIONAL TESTING.
UNDERSTANDING OF RESTFUL ARCHITECTURE.

CERTIFICATION DETAILS

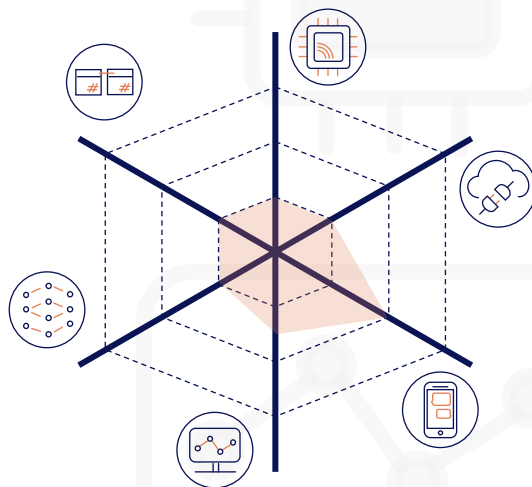
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 250 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT OR TESTING OF A MOBILE APPLICATION OR A HUMAN MACHINE INTERFACE ON AN ANDROID DEVICE. THE HMI SHOULD BE USED FOR MANAGING AN IOT DEVICE, WHILE THE MOBILE APP MAY USE INBUILT SENSORS IN THE ANDROID DEVICE.

TARGET SKILLS: NODEJS/PYTHON, EXPRESS/ BOOTSTRAP, JSON/XML, ANDROID, FIGMA, POSTMAN, HTTP, WIFI.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT CLOUD DEVELOPER CERTIFICATE

PREREQUISITES

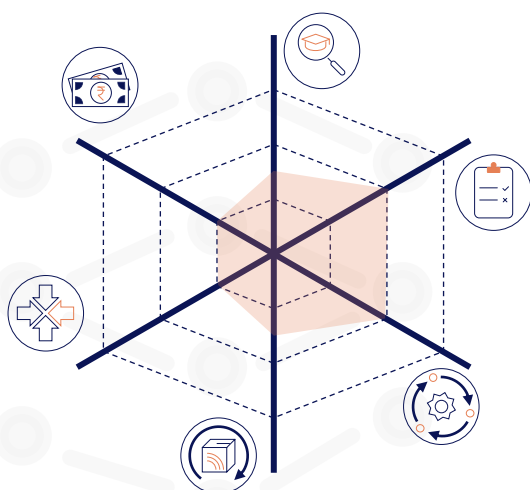
NODEJS/PYTHON PROGRAMMING SKILLS.
UNDERSTANDING OF FUNCTIONAL AND API TESTING.
UNDERSTANDING OF SAAS APIS AND AUTHORIZATION PROTOCOLS.

CERTIFICATION DETAILS

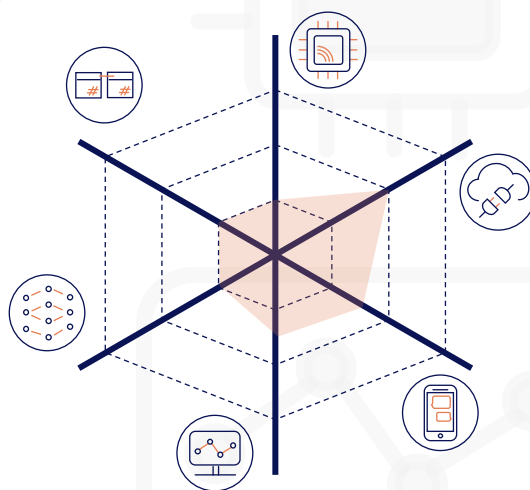
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 100 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF A UI APPLICATION FOR MANAGING IOT DEVICES AND AT LEAST 150 HOURS HAS BEEN SPENT TOWARDS SAAS INTEGRATIONS WITH THIRD PARTY PLATFORMS OR CLOUD NATIVE SERVICES.

TARGET SKILLS: NODEJS/PYTHON, EXPRESS/ BOOTSTRAP, JSON/ XML, OAUTH, REACT/ANGULAR, FIGMA, POSTMAN, HTTP, WIFI.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT EMBEDDED DEVELOPER CERTIFICATE

PREREQUISITES

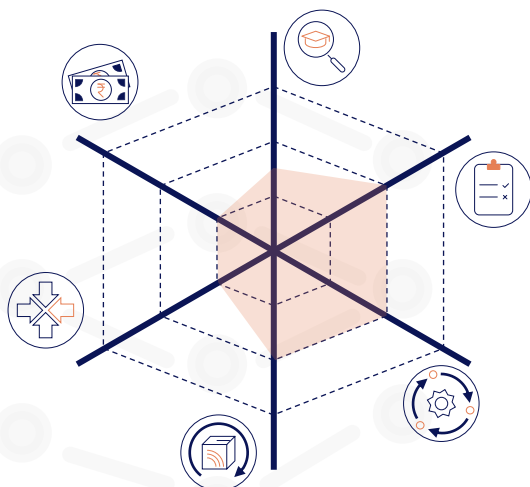
C/NODE JS PROGRAMMING SKILLS.
FUNDAMENTALS OF WIRE PROTOCOL INTERFACING.
UNDERSTANDING OF FUNCTIONAL TESTING.
UNDERSTANDING OF DIGITAL ELECTRONICS AND SENSORS.

CERTIFICATION DETAILS

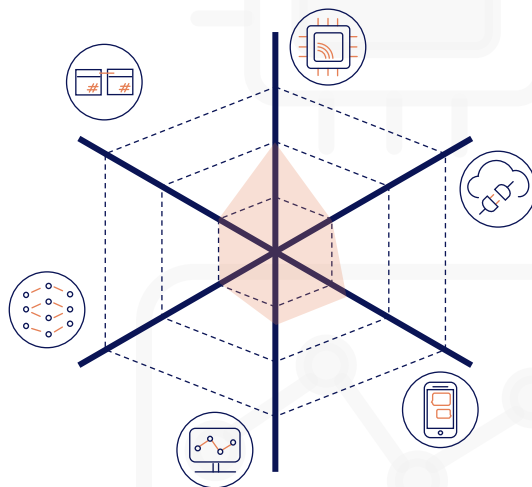
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 250 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF AN EMBEDDED APPLICATION ON AN IOT DEVICE.

TARGET SKILLS: C, NODE JS, BOOTSTRAP/EXPRESS, ANGULAR/REACT, JSON/CBOR, HTML, BLUETOOTH/WIFI, UART/I2C/SPI.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT BLOCKCHAIN DEVELOPER CERTIFICATE

PREREQUISITES

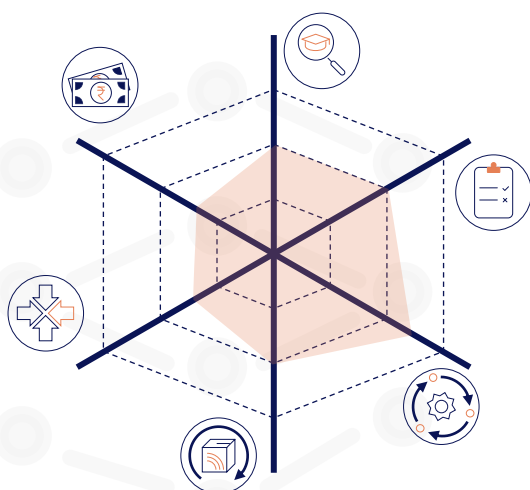
NODE JS/PYTHON/JAVA PROGRAMMING SKILLS.
FUNDAMENTALS OF BLOCKCHAIN OPERATIONS.
UNDERSTANDING OF SAAS APIS AND CRYPTOGRAPHIC PRIMITIVES.

CERTIFICATION DETAILS

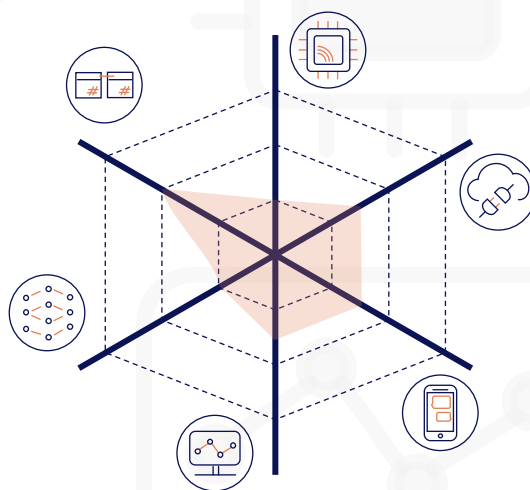
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 250 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF A BLOCKCHAIN FRAMEWORK AS A BACKEND SYSTEM TO MANAGE TRANSACTIONAL DATA FROM IOT DEVICES.

TARGET SKILLS: NODEJS/PYTHON, EXPRESS/ BOOTSTRAP, ANGULAR/REACT, JSON/XML, ETHEREUM, POSTMAN, DAPP.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT MACHINE LEARNING DEVELOPER CERTIFICATE

PREREQUISITES

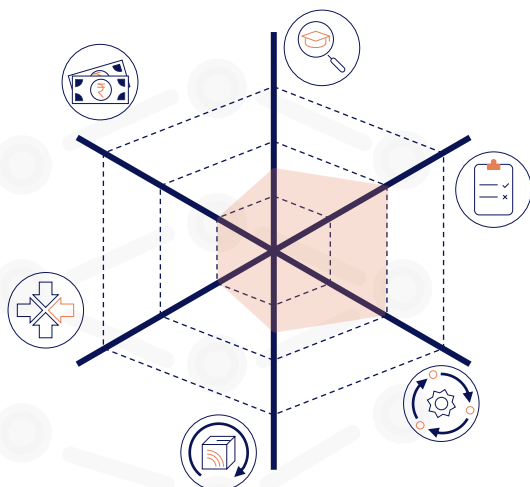
NODE JS/PYTHON PROGRAMMING SKILLS.
FUNDAMENTALS OF TIMESERIES DATABASES.
FUNDAMENTALS OF STATISTICS AND PROBABILITY THEORY.
UNDERSTANDING OF ALGORITHMIC COMPLEXITY.

CERTIFICATION DETAILS

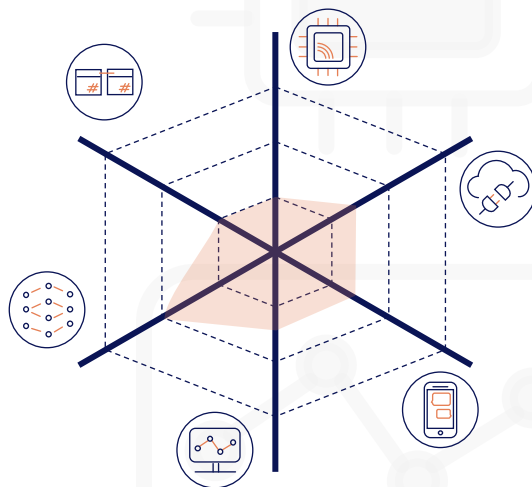
THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 250 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF A COMPUTATIONAL MODEL, WORKING WITH DATA FROM AN IOT DEVICE.

TARGET SKILLS: ETL, NUMPY/SCIPY, NODEJS/PYTHON, MONGO, DATA STUDIO/POWER BI/DATAWRAPPER, WIFI.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

IOT DEVELOPER CERTIFICATE

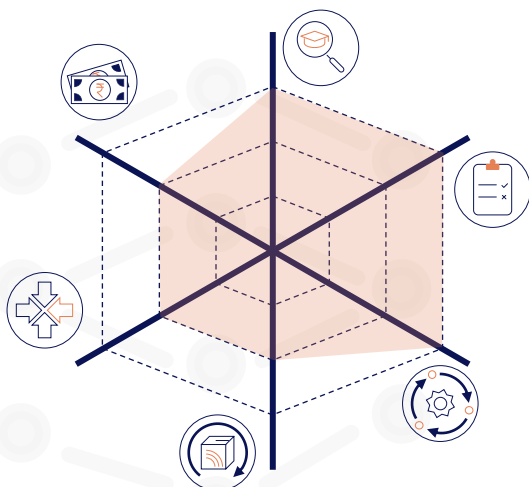
PREREQUISITES

FOUNDATION CERTIFICATES.
STRONG PROGRAMMING EXPERIENCE IN C, PYTHON/JS/JAVA.
DEVELOPMENT OF TEST HARNESS AND FUNCTIONAL TESTING.
DEVELOPMENT AND TESTING OF AUTHENTICATED APIS.
EXPERIENCE WITH WIRED/WIRELESS STANDARDS.

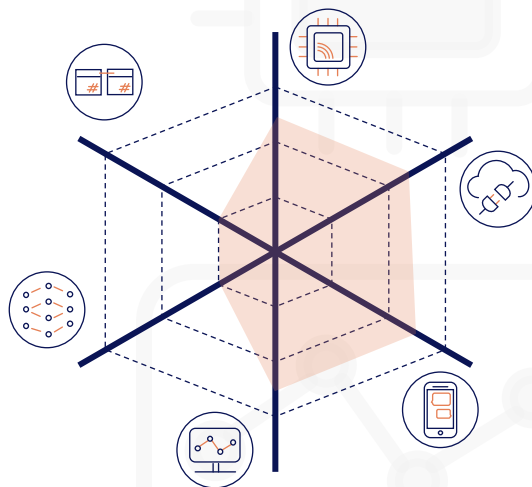
CERTIFICATION DETAILS

THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 500 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF AN IOT SYSTEM, COMPRISING OF IOT END DEVICES AND AN IOT DATA AND DEVICE MANAGEMENT APPLICATION. FOUNDATION CERTIFICATES CAN BE UPGRADED BY FULFILLING THE ADDITIONAL SCOPE/EFFORT REQUIREMENTS.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

AIOT DEVELOPER CERTIFICATE

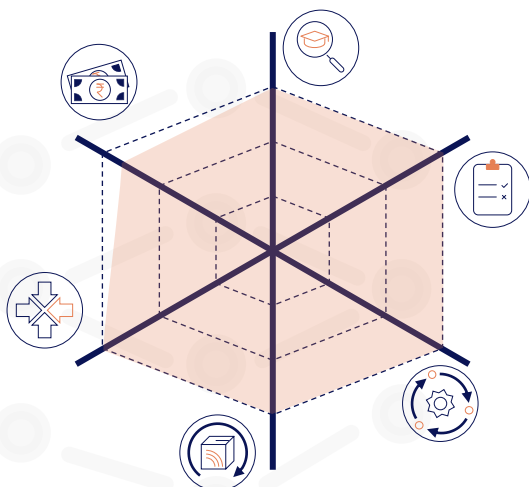
PREREQUISITES

FOUNDATION/ IOT DEVELOPER CERTIFICATES.
STRONG PROGRAMMING EXPERIENCE IN C, PYTHON/JS/JAVA.
DEVELOPMENT OF TEST HARNESS AND FUNCTIONAL TESTING.
DEVELOPMENT AND TESTING OF AUTHENTICATED APIS.
EXPERIENCE WITH WIRED/WIRELESS STANDARDS.

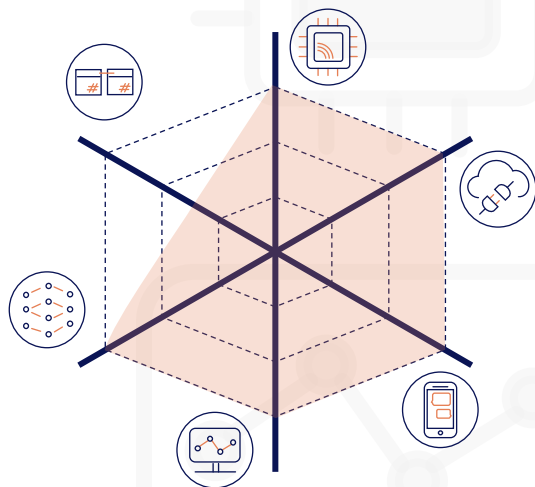
CERTIFICATION DETAILS

THIS CERTIFICATION IS BASED ON SUCCESSFULLY EXECUTING A PROJECT WHERE AT LEAST 750 HOURS HAS BEEN SPENT TOWARDS THE DESIGN, DEVELOPMENT, TESTING AND DEPLOYMENT OF AN AI ENABLED IOT SYSTEM, COMPRISING OF SELF-LEARNING IOT DEVICES AND AN IOT DATA AND DEVICE MANAGEMENT APPLICATION. FOUNDATION OR IOT DEVELOPER CERTIFICATES CAN BE UPGRADED BY FULFILLING THE ADDITIONAL SCOPE/EFFORT REQUIREMENTS.

COMPETENCY OUTCOME



ROLE FITMENT



TECH STACK

OUR CERTIFICATION PROCESS

1. GOAL DEFINITION



Name your project



Research similar projects



Define project objectives



Commit time to your project

2. SYSTEM ARCHITECTURE



Scope your project



Define functional components



Identify the interfaces



Define acceptance criteria

3. PROJECT PLANNING



Version control system



Milestone development plan



Integration plan



Test plan and coverage

4. CODE DEVELOPMENT & DEPLOYMENT



Milestone development



3rd party integrations



Unit testing



Deployment Scripts

5. TEST REPORT GENERATION



Test harness



Functional and UI validation



Integration testing



Testcase execution report

6. USER MANUAL DOCUMENTATION



Document quality



Independent replicability

7. DEMO DAY



Project Q&A



Acceptance demonstration

#FOUNDER PROFILE



ATANU ROY CHOWDHURY IS AN IOT EVANGELIST. HE IS THE TECHNOLOGY MENTOR FOR RANMIR FOUNDATION, WHICH FOCUSES ON BOTTOM OF THE PYRAMID INNOVATIONS ACROSS 7 STATES.

HE WAS A TECHNO-FUNCTIONAL CONSULTANT FOR IOT/AI LED DIGITAL TRANSFORMATIONS, PROVIDING DELIVERY AND SOLUTIONING SUPPORT TO ALTIUX'S GLOBAL SALES TEAM FOR OVER 100 IOT SOLUTIONS.

PRIOR TO ALTIUX, ATANU WAS A TECHNICAL MEMBER AT INFOSYS SETLABS, HARVARD SENSOR NETWORKING LAB, TELCORDIA ADVANCED TECHNOLOGY SOLUTIONS LABS (NOW ERICSSON) AND BLUE HIGHWAY (A WELCH ALLYN COMPANY) .

HE HAS POST GRADUATE DEGREES IN COMPUTER SCIENCE FROM IIT GUWAHATI AND HARVARD UNIVERSITY. HE IS A SENIOR MEMBER OF IEEE AND CSI. HE HAS PUBLISHED OVER 35 PAPERS AND PATENTS IN THE AREA OF IOT AND WIRELESS SENSOR NETWORKS.

CONTACT:

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WHATSAPP/MOBILE: +91 9830280409

OFFICE: HA 130, SALT LAKE CITY, KOLKATA 700097. WB